

10.0 SPECIAL PROVISIONS/SPECIAL EQUIPMENT

10.1 CAPACITORS

Customers installing capacitors to improve the power factor of their load should contact LIPA so advice may be given regarding supply system characteristics.

10.2 RADIO AND TELEVISION TRANSMITTERS, FLASHING SIGNS, WELDERS, ELECTRIC FURNACES

The operation of large flashing signs, welders, and furnaces, dielectric and induction heaters, radio and television transmitters, X-ray equipment, reciprocating compressors and similar apparatus having intermittent flow of large currents sometimes interferes with other users of the electric service. The customer shall consult LIPA in each case so that the character of electric service that will be supplied, the corrective equipment needed, and other special precautions that must be taken will be mutually known factors before planning to use such apparatus.

10.3 LOAD CONTROL MANAGEMENT

10.3.1 Where a customer requires information from LIPA metering equipment, namely, KW data pulses, for the operation of load control equipment, the Company will furnish electric demand pulses at the point of metering.

10.3.2 The customer will be required to:

- A) Compensate LIPA for service and equipment provided.
- B) Enter into an agreement with LIPA wherein responsibilities of both parties are provided.
- C) It is recommended that before any load control device is purchased, agreement be reached with the Company regarding installation practices.

10.4 GENERATORS AND PHOTOVOLTAIC SYSTEMS

10.4.1 All installations of customer's generating equipment require adherence to fundamental rules for safeguard of all personnel and the LIPA's equipment. LIPA must be consulted before any generating equipment is connected to any circuits which are, or can be, supplied from LIPA's distribution system. This is to insure against any back feed of electricity into LIPA's system. When a customer has a generator, the customer's metering equipment must be placarded that a generator is present.

10.4.2 An open transition (break-before-make) double throw type switch or contactor shall be provided to transfer all ungrounded conductors of an emergency lighting or power load to either the stand-by generator or the normal supply (See drawing D35). Automatic transfer systems must be approved by LIPA. Installation of a closed transition transfer switch will be considered parallel operation and will be subject to the requirements of Section 10.4.4 below.

10.4.3 The stand-by generator should be 60 Hertz (cycles per second) alternating current.

10.4.4 Interconnection of generation in parallel with the LIPA system, if not constructed with the proper relay and protection, can be hazardous to customer equipment, LIPA equipment, LIPA employees, and electrical contractors. LIPA will provide the technical specifications required for interconnection of independent power generation units, upon request. In addition, all independent generators of power are required to sign an Interconnection

Agreement with LIPA which highlights the responsibilities of each party. Copies of this agreement and LIPA's interconnection requirements can be found on LIPA's website www.lipower.org/papers/inter.html.

10.4.5 Photovoltaic systems installed by the customer shall require:

- A) Installation of weatherproof NEMA 3R load break rated visible open disconnect device lockable in the open position by a minimum 3/8" shank padlock is required for all photovoltaic installations and similar types of distributed generation. The location of the switch shall be as determined by LIPA.
- B) A local isolation transformer may be required.
- C) The main disconnect shall be capable of supplying, interrupting and disconnecting the designated service in its entirety. If the photovoltaic disconnect switch is greater than 10' from the LIPA meter, a placard is required at the meter to identify the location of the photovoltaic disconnect switch.
- D) The nature of the size and capacity of the disconnect installation requires that it be mounted between 3' and 6' of grade to guarantee stability, safety and total operational flexibility under all service conditions.
- E) Installation and protection of the PV system must meet the requirements of NEC, NESC and any applicable municipal codes. In addition, LIPA will require an electrical inspection certificate ensuring the installation meets the requirements of these codes.

10.5 CARRIER CURRENT SYSTEMS

If a customer uses his building wiring for a current carrier system for communication or signaling purposes, the customer shall install suitable filter equipment or make other provisions approved by LIPA to keep LIPA's distribution facilities free from carrier currents produced by his equipment.